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# Echolalia as communication behaviour

Abstract: Echolalia is a natural phenomenon in the development of child speech. After 30 months of age, echolalia becomes a pathological phenomenon, most often associated with deficits in the ability to initiate and sustain social interaction. Researchers argue about the role of echolalia in the acquisition of language and communication skills of people with autism spectrum disorder. They are trying to answer the question of whether echolalia is an inhibiting factor in language acquisition or whether it can also be one of the main predictors of further speech development. The distinguishing of echolalia and echolalic speech in the communication of people with autism, proposed by Jacek Błeszyński, makes it necessary to revise the existing definitions of echolalia and present this phenomenon from the perspective of communication theories, among others, in the context of the concept formulated by Dan Sperber and Deirdre Wilson.

Keywords: echolalia, echolalic speech, autism, communication

## Echolalia jako zachowanie komunikacyjne

Streszczenie: Echolalia to naturalne zjawisko w rozwoju mowy dziecka, ale utrzymujące się po 30 miesiącu życia staje się zjawiskiem patologicznym, najczęściej związanym z deficytami zdolności do inicjowania i podtrzymywania kontaktów społecznych. Naukowcy spierają się o rolę echolalii w nabywaniu umiejętności językowych i komunikacyjnych osób ze spektrum autyzmu. Próbują odpowiedzieć na pytanie, czy echolalia jest czynnikiem hamującym akwizycję języka, czy też może być jednym z głównych predykatorów dalszego rozwoju mowy. Rozróżnianie echolalii i mowy echolalicznej w komunikacji osób autystycznych zaproponowane przez Jacka Błeszyńskiego powoduje konieczność zrewidowania dotychczasowych definicji echolalii i przedstawienia tego zjawiska z perspektywy koncepcji sformułowanej przez Dana Sperbera i Deirdre Wilson.

Słowa kluczowe: echolalia, mowa echolaliczna, autyzm, komunikacja

Observing speech development of the child shows that echolalia is not a symptom specific to persons with autism. Typically developing children and people without autism but with delayed speech development, often repeat their own and other people's utterances. During the normative development of language, echolalia is usually transient. However, researchers of communication in people on the autism spectrum ask themselves whether the echolalia present in autism spectrum disorders is a destructive and self-stimulating phenomenon (Morton, Morton & Grace, 2016; Korendo, 2013), or if it helps with the acquisition of language competence (Błeszyński, 2010). Our aim is to present the phenomenon of echolalia as an important element in the development of speech of a person on the autism spectrum. The repeated utterances should be interpreted in specific situational contexts. If they are understandable to the recipient by reference to the implicit context, they can be considered conversational implicatures. This suggests that echolalia can be used in speech therapy in programming speech and language in persons with autism. In research literature, little space is devoted to echolalia and its role in developing the communicative competence of people on the autism spectrum.

According to Uta Frith, echolalia is a manifestation of the separation of peripheral processing systems from the central system that deals with meaning (Frith, 2008, p. 155). Elements of language assimilated by adult language user using echolalia at the stage of mastering the grammatical structure of speech cannot be interpreted meaningfully at a higher level. As many studies show, mainly in the light of the theory of mind, a language that fully communicates is not the essence of the language of people with autism. It is partially or fully copied speech, in a broader sense it is "speaking for someone". "Speaking for someone" is the imitation of speech, that is, the direct or delayed repetition of similar intonation, involuntarily and automatically, of sounds, words, entire sentences, and even longer texts. People with autism repeat not only the words heard at a given moment, but also remember them when they come into contact with a signal referring verbally or event-related to the previous situation. From the cognitive point of view, according to Frith (2008, p. 155), echolalia consists in searching in memory (as in a search engine in a resource of numerous lexical connections) for associations with a given word, most often on the basis of contiguity. Communication is about conveying meaning, not about being faithful to messages. A child with autism selectively pays attention to speech and is able to fluently translate what he or she hears into spoken speech. However, this process bypasses the level of interpretation of meaning. It turns out, therefore, that echolalia uses the linguistic context based on the knowledge of conventional linguistic structures, which makes them easy to repeat, but the faithfully repeated expressions perfectly processed from the point of view of phonological, prosodic and syntactic units do not become part of the overall meaning of the utterance, do not reflect its meaning and disrupt the mechanism

of inference, namely, inference, guessing, allowing for the transfer or obtaining of new information not included in the message. This inference can be made thanks to a set of premises in the field of so-called common knowledge. The inference process can be shown, for example, in the course of understanding the colloquial dialogues of a spoken language when interlocutors skip over entire sequences of information and nonetheless reach agreement (Skudrzykowa & Urban, 2000, p. 52).

A: Do you have to get up early tomorrow?
B: I don't like Mondays.

The conversation seems to be unsuccessful but interlocutor B understood the meaning of interlocutor A's question. The course of inference consists of such components as: B likes to sleep longer, Monday is the beginning of the week when you have to get up earlier. B thus confirms to A that he has to get up earlier.

The interference-code model of communication proposed by Dan Sperber and Deidre Wilson will be discussed in the subsection on Relevance Theory further on in the article.

Echolalia can also be seen in the utterances of two-year-old children who are suspected of having autism spectrum disorder and who have not yet mastered enough syntactic competence, and also in children with hearing loss and on the autism spectrum, who sometimes reproduce gestures, just as children with ASD sometimes repeat words. Children with hearing loss and children with ASD do so at similar stages of language development when understanding is relatively low (Shield, Cooley & Meier, 2017). Marta Korendo distinguished echolalia in utterances of children on the autism spectrum, at all levels of their language, starting from non-verbal behaviours such as guttural, oral and nasal sounds, which are produced by different people in an original and unique way. Children can also repeat sequences of syllables or nonsense words. The most common type of echolalia concerns the repetition of words and phrases (Korendo, 2013, pp. 88–89). In addition, echolalia may concern more extensive units of speech, such as: multipurpose monologue, dialogue as well as longer texts frequently on TV, the Internet, and radio.

## Terminological clarification

Echolalia is generally defined as the automatic repetition or echoing of sounds, words, or even entire sentences after they were heard (Błeszyński, 2010, p. 100). Following the ICD classification (R.48.8), echolalia (also known as echologia or

echophrasia) means the repetition of a vocalization performed by another person (when repeated by the same person, it is called palilalia). As a repetitive behaviour, it is further associated with echopraxia, which is the automatic repetition of movements; these two phenomena are subsets of imitative behaviour in which sounds or actions are imitated without clear awareness.

In psychiatry, echolalia is treated as one of the symptoms in some mental illnesses and disorders, for example, childhood schizophrenia (Błeszyński, 1998), catatonic schizophrenia (Bilikiewicz & Strzyżewski, 1994; Jarema, 2016), intellectual disabilities, and in the Kandinsky–Clérambault syndrome (Bilikiewicz, 1992). In these disorders, apart from the repetition of words, echolalia also includes imitation of gestures and movements observed in other people (echopraxia) and facial expressions of people from the patient's immediate environment (echomimesis).

Immediate and delayed echolalia (Simon, 1975, pp. 1439–1446) along with functional (mild) echolalia are distinguished; the latter concerns the repetition of messages related to particular situations, or interests of the sender, and performs communication functions (Błeszyński, 2009; Roberts, 1989, 2014). Delayed echolalia, in turn, is recalling words or phrases that the child has heard in the past (Carr et al., 1975). Immediate echolalia concerns the direct repetition of the sound, immediately after hearing. Research shows that delayed echolalia hinders effective communication and learning (Carr, 1979). In the case of immediate echolalia, however, the researchers are divided. According to Bobkowicz-Lewartowska (2000), echolalia is described in some studies on autism as a process of involuntary and meaningless repetition, while in others as a stage in speech development (Błeszyński, 2010).

Wardyn and Gałkowski (2002) conducted research involving 50 boys and 50 girls with autism (at the average age of 5 years and 5 months) manifesting different types of echolalia. In order to assess the examined children they used a psycho-educational profile developed by Schopler and a questionnaire for parents. It turned out that in all children the frequency of occurrence of all types of echolalia decreased as the developmental quotient increased. The types of echolalia are connected with the developmental age. The frequency of both immediate and delayed echolalia is inversely proportional to the child's developmental age. In all children under observation, as the level of psychomotor development increases (e.g., mimicry, perception, small and large motor skills, visual-motor coordination, communication), the frequency of all types of echolalia decreases. Delayed echolalia most often occurs between 3.1 and 4.0 years of age (Siegel, 2012). It is also worth adding that the above results allow us to capture the advantage of immediate echolalia in boys and delayed echolalia in girls. As we can see, there are some discrepancies in the definitions and understanding of the role of echolalia in human development.

Echolalia is first treated as a symptom of mental disorder, manifested by the unnecessary, non-functional repetition of words or phrases spoken by others (Cameron, 2005, p. 34). This position is currently being revised, especially if it concerns the development of language and communication skills of people on the autism spectrum.

Finally, echolalia can be considered a symptom of delayed speech development either when speech development has been inhibited and the child's echolalia exceeded the upper developmental limit or in the case of speech regression.

Jacek Błeszyński (2010) postulates changing the approach to conceptualizing echolalia. To this end, he suggests the introduction of the term "echolalic speech". It is to be understood as a conscious action aimed at presenting certain content undertaken without the ability to act independently within a segmental system; however, it involves the autistic person in the interaction (Błeszyński, 2010, p. 103). Lovaas (1993) defines echolalic speech as the collection and storage of auditory elements from the environment in the brain. It can be treated as an "internal speech test" (Wardyn & Gałkowski, 2002, pp. 150–151). If during the automatic repetition of the sounds heard there is a change of the utterance in the suprasegmental system, it indicates an intention of creating an utterance.

Example (1)

*"Do you want a doll or a ball?"* asks mom. Global rise – rising, questioning intonation.

"*Want doll."* replies the child (3 years old). Global fall – affirmative intonation.

The child, even though it faithfully reproduces the grammatical pattern of the sentence uttered by its mother, responds according to its own needs, choosing the object it wants to play with. What is important here is that the intonation line of a sentence that is spoken by a child corresponds to an affirmative sentence. Thus, the differentiating factor in the interpretation of an utterance produced by an autistic child is not a grammatical structure but a change of vocal tone. According to Błeszyński's definition, it is an example of echolalic speech. In isolated echolalia (mechanical repetition of an utterance) there is often progression, that is, no increase or decrease in the basic tone within a sentence.

The identification of echolalia with the act of speech appeared in Cempa-Włodarczyk (2016, p. 172), according to whom echolalia is an act of speech functioning differently in the mind of a person suffering from autism. It is primarily the recipient of the message who, by referring to the knowledge of the behaviour of a child with autism in familiar situational contexts, may recognize the communication intention (Bernard-Opitz, 1982; cf. Przybyla, 2008, pp. 11–14; 2019, pp. 351–362, Przybyla & Kasica-Bańkowska, 2016).

Thus, by assuming the intentional character of echolalia and distinguishing it from echolalic speech, we make it necessary to revise the existing definitions of echolalia and present this phenomenon from the perspective of communication theories, among others, in the context of the concept of relevance formulated by Dan Sperber and Deirdre Wilson (2004, quoted in Makarewicz, 2012).

## Sperber and Wilson's Relevance Theory

An important thread in the theory developed by Sperber and Wilson (2004, cited in Makarewicz, 2012, pp. 177–185) is the thesis that the process of communication is made possible by the human ability to attribute to other people states and intentions well known to us. Thanks to realizing one's own feelings, and applying them to another person, we are able to predict and explain the behaviour and actions of other people. A specialized component of communication behaviour interpretation is responsible for this ability. Understanding and communicating is done by interpreting utterances in context (Sperber & Wilson, 2004; Makarewicz, 2012). The interpretation of an utterance is the interaction between the linguistic structure, extra-linguistic information, and mental information structures. In people's minds, there are modules responsible for specialized tasks. Their role can be reduced to transforming the sound signals of an utterance into mental representations, which is the basis of the initial process of understanding. Mental representations are organized into meaning structures and form components of the theory of mind, understanding, and inference. Due to the said ability of inference, it is possible to fill the gap between coded knowledge, semantic representation, and the mental value of the utterance. Some of the communicated content is read from the recipient's level of knowledge, with the sender's intentions either being read correctly or not. The module of understanding the stimuli that reveal the intention of the sender of a message, called ostensive stimuli, works according to the principle of communicative relevance (optimal relevance corresponds to each ostensive stimulus) and interpretation of ostensive stimuli (arriving at cognitive conclusions is based on the principle of least effort, and is largely based on the participants' perceived behaviour). Thus, the basic code (language), understood as a set of specific conventions known to the participants, is only one element of a significant communication process. The context of the utterance and the rules of inference should be placed next to the language. The use of the basic code – language – is not unconditional; one can infer based on non-coded ostensive stimuli, for example, answer a question with a gesture. Sperber and Wilson assume a separate inference module. It is activated

when it becomes possible to apply elimination deduction rules in the communication process. These are representations of communicative meanings which are subject to rules of logical order, namely, they have a linguistic form ordered in the form of semantic, inflected, or syntactic structures encoded in the language. Such an encrypted structure is made up of, among others, echolalic utterances.

## Echolalia in selected communication situations – an analysis

Let us consider the procedure of searching for proper interpretation in relation to selected communication situations where echolalia was observed.[1]

Example (2)

T: *Good morning. My name is Eve.* [I extend my hand to greet] *What's your name?*

D*: Putin!* (2.5 years) [Sweepingly looks at the therapist, turns his head, does not mirror his behaviour].

T: *Look, we've got toys in this box. What do we need to prepare dinner?*

D: *Putin there, puutin here.* [He runs around the room, takes the car in his hand, holds it high up and turns the wheels].

Example (2) shows an instance of delayed echolalia. Some kind of stimulus, probably a new situation, caused him to cite the name of the Russian president. In this case, one can agree with the thesis that echolalia is a process based on the collection of auditory elements from the environment in the brain, which are reactivated under the influence of some stimulus, probably based on an attempt to adapt to the new situation. But the above is not an instance of echolalic speech. The pragmatic goal of the therapist's statement was not achieved.

Example (3)

T: *Good morning. My name is Eve.* [I extend my hand to greet] *What's your name?*

D: [Enters the office, sits on the mattress, covers his face] *boom boom boom boom boom boom*.

1 The examples cited in this article come from the linguistic research that covered children from urban (Kielce) and rural (Świętokrzyskie Province) environments. The research was carried out within the framework of the scientific project "Communication in norms and disorders – a multidisciplinary approach". This research project was part of a broader research programme dedicated to communication competence in norms and various disorders of language communication, and was funded by the Ministry of Science and Higher Education.

T: *Let's cook dinner for the teddy bear and dolls and feed them*. [Chooses the necessary props lying next to the box, sits the teddy bear and doll in front of the child].

D: *Boom, boom! Boom, boom!!* (2.5) [Increasingly louder].

T: *Look, there on the shelf, high up, there are cars. There. Can I get you one?*

D: *Boom, boom*.

Example (3) refers to the theory of echolalia pertaining to the stages of speech development. Echolalia appears in properly developing children at the cooing stage – about 9 months of age (reaches its peak at 30 months of age and then gradually wanes) as so-called physiological echolalia, which is a type of motor activity. This phenomenon consists in the tendency to repeat sounds, which do not yet have meaningful content, uttered by other people. Echolalia at this time is rather a game in which the child finds pleasure in repeating the words, it is a mimicking activity, aimed at improving the articulators. Therefore, echolalia can be regarded as a developmental norm in infancy, and then it interferes with gurgling and cooing. According to Daniel Heller-Roazen (2012, p. 10), "echolalia is the memory of undifferentiated, unremembered cooing, the loss of which allowed all languages to exist." Infants are potentially capable of producing any sound in human languages without the slightest effort. It can be assumed that thanks to such abilities a child could acquire any language easily. Unfortunately, between the cooing of an infant and the first words of a child, the unlimited phonetic possibilities seem to dwindle (cf. Przybyla & Kasica-Bańkowska, 2016, pp. 548–554). Jakobson (1968, p. 21) emphasizes that a child loses almost all of its ability to make sounds when it moves from the pre-language phase to the occurrence of the first words. Over the following few years, it will gradually master the sonic shape of its native language, ignoring foreign sounds. The question then arises of whether the acquisition of language is only possible through the act of forgetting the ability of undifferentiated articulation, or whether there are traces of sounds heard, which a child with autism sometimes verbally brings into the world? Childhood echolalia is treated as a period of initial identity formation (Błeszyński, 2010, p. 102). It is worth referring here to Hobson's intersubjective model (1993). Already in the brain of newborn babies there is a division into two information processes, the I–you (as an attempt to understand other people) and the I–it (as a process of understanding things). It is a psychological process occurring in an individual and participating in the coordination of interpersonal interactions. It is assumed that the proper social interaction is mentally-mediated (Enfield & Levinson, 2006; Bialek, 2010), namely, it contains mutual suppositions of other people's intentions and beliefs and attempts to predict future behaviours, meaning that it is based on taking the perspective by both participants of the interaction. Piaget (1992) opposed the intentional nature of such echolalia.

According to him, it is a game aimed at improving the articulators through the process of imitation (after Błeszyński, 2010, p. 102).

Example (4)

T: *Good morning. My name is Eve*. (2.5) [I extend my hand to greet] *What's your name?*

D: *Good, eef, good eef, no* [Sweepingly looks at the therapist, looks down, *does not* extend his hand to greet].

T: *Let's cook dinner for the teddy bear and dolls and feed them*. [Shows the necessary props lying next to the box, sits the bear and doll on the mattress, cooks].

D: *Ook ina bee, ook ina bee* [Repeats the phrase heard by the therapist, walks up to a toy box, throws all its contents on the mattress, puts a block in a pot, and moves it so that the block hits the walls of the vessel, then a metallic sound is created, he lifts the pot to his ear and continues to focus on the sounds emitted by the block in the pot, he squeaks at attempts to take the pot with the block away from him] – the child says: *Ooki ina, ook ina*.

Here we have an example of direct, functional echolalia. The repetition of the words was related to the specific situation in which the child was. According to Błeszyński, this would be echolalic speech. The child used the pattern received directly to establish communication with the therapist. Echolalic speech can take the form of:

a. mixed speech – when a child, despite having developed verbal skills at a higher level, uses echolalic speech in certain situations;

b. echolalia being a model for the acquisition of language skills, by transforming echolalic utterances into vocabulary, which the child manipulates to create new utterances.

## Conclusions

Historical descriptions of the speech of children with autism focused on the characteristic repetition of sounds, words, and phrases, which was even considered one of the basic symptoms of autism (Kanner, 1943; Creak, 1961; Gernsbacher, Geye & Weismer, 2005; Giambattista et al., 2019). Thus, the earliest diagnostic criteria for childhood autism in *Diagnostic and Statistical Manual of Mental Disorders* (DSM)-III concerned serious deficits in language development or specific speech patterns, such as immediate and delayed echolalia (American Psychiatric Association [APA], 1980). When the diagnostic criteria of DSM-III-R (APA, 1987) were revised, echolalia ceased to be one of the main criteria in the diagnosis of autism

and was included in a long list of possible communication disorders. The term itself does not feature in the DSM-IV (APA, 2000) and DSM IV-TR (APA, 2004) classifications, but there is still a reference to stereotypical and repetitive use of language. In DSM-5 (APA, 2013), echolalia is no longer even considered a communication disorder. Instead, it is treated as a limited, repetitive pattern of behaviour, interests, or non-linguistic activities, such as stacking toys (Morton et al., 2016).

Echolalia was also initially interpreted through the prism of psychoanalysis. Roberts (2014, cf. also Kominek, 2020) reports that, in psychoanalytical terms, the use of echolalia by children with autism was considered "hostile behavior indicating a failure in ego development". When psychoanalysis gave way to behaviorism, the use of echolalia by autistic children was reinterpreted as self-stimulating behavior that impeded their learning. There is empirical evidence that goes against classifying echolalia as self-stimulating or repetitive behavior; it argues in favor of recognizing echolalia as a communicative behavior that should be extinguished (Roberts, 2014, p. 57, as cited in Gernsbacher, Morson & Grace, 2015; cf. Lovaas, Schriebman & Koegel, 1974). In the factor analysis of the diagnostic criteria of autism, echolalia does not affect the depth of autism as other self-stimulatory behaviours such as limited repetitive use of objects, repetitive motor movements (e.g. fluttering or waving a finger), or behavioural rituals. Echolalia, next to the reluctance to use the pronoun "I" (Lecavalier et al., 2006), is not included among the axial criteria in the diagnosis of autism (Aman et al., 2004, Lam & Aman, 2007).

Based on the cited examples as well as articles on echolalia, the following common points of the cited definitions of this phenomenon can be enumerated:

First of all, the situational context in which echolalia occurs is important. Prizant and Duchant (1981) and Frith (2005) indicate that echolalia in various forms occurs in more than 75% of speaking people with autism. As Charlop writes (1989), echolalia intensifies when there is any change in the environment, in an uncertain situation, for instance, when a child with autism sees a stranger. Echolalia is also a reaction to excitement, emotional stimulation, for example, to a stay in an unfamiliar place, an excess of situational (noise) and linguistic stimuli: words, sentences, utterances (Wardyn & Gałkowski, 2002, p. 151). The very mechanism of echolalia, that is, the creation of text related to specific words and language units, is based on searching the memory for elements associated with a given word or grammatical structure. Thus, it turns out that the construction of echolalia uses linguistic (grammatical, lexical) and situational context. The sender of echolalia, based on the knowledge of conventional language structures, easily repeats the texts heard (Faria Saad & Goldfeld, 2009). Thus, Kominek (2014) indicates the metonymic nature of echolalia. The recipient of a linguistic message – a person with autism in the cited examples – is looking for a consituation, that is, a similar situation, events, time, and place as well as relations between the world and himself, to finally use the linguistic structure that he remembers.

Another issue highlighted in the cited definitions of echolalia is the repetition of words or phrases heard. In the first years of a child's life echolalia is a natural phenomenon, children repeat words and expressions spoken by adults, thus learning the language. In human speech development, repetition of this kind appears already in the cooing phase and occurs in all babies between three and eight months old. This repetition allows the child to effectively assimilate the tentative names of objects, animals, and activities by assigning them sound-imitative terms (Gałkowski, 1993b, p. 175, cf. Landry & McEvoy, 1988; Roberts, 1989). This echoic language behaviour (the term we use for typical childhood repetition) (Skinner, 1957/2014) is an appropriate step in the development of language (Riper, 1963); this kind of repetition of words ceases to occur at 30 months. It is seen as an attempt by a child to understand a new word in relation to a specific situation. As we gain more experience, the sound imitative shots of reality gradually give way to the proper lexical shots of reality, attributed to specific characters, objects, activities, and as a result the vocabulary/lexicon grows. At this stage of communication and lexical development, the child is only in the holophrases stage, so he/she does not yet have a fully developed syntactic system. However, to communicate his/her own needs more effectively, he/she is willing to learn new words. Jean Piaget (1992), describing the meaning of echolalia in children's development, takes the position that unintentional echolalia of the first months of life is rather fun and the child takes pleasure in repeating different sounds. This game, which is also attributed to the improvement of articulators thanks to the process of repeating sounds and imitating conversations heard in the immediate environment, becomes a problem when a child is not able to transpose this sound play into a restructured language knowledge (Cempa-Włodarczyk, 2016). In adulthood, the repetition of words and sentences heard in different circumstances in inappropriate situational contexts is treated as an anomaly. A person affected by echolalia is able to express the content communicated by others not only in the same order but also in the same intonation. Words and sentences are repeated stereotypically – one has the impression that the patient is not trying to communicate anything in this way. A person with symptoms of echolalia does not show initiative in speaking or spontaneous reactions to the utterances of others. He or she does not sustain a conversation, does not create extended or longer statements, has problems with language pragmatics, and does not understand abstract concepts. However, when the recipient of the repeated message listens to the intonation line and senses the conditions of the communication situation, he/she will recognize a confirmation, request, protest, or question in many echolalic utterances.

In normative speech development, the echo (repetition) intensifies when new verbal stimuli (i.e. new vocabulary) appear. This means that the "echo response" is an active approach to verbal understanding (Fay & Butler, 1971, p. 651). When echolalia decreases, not only the lexical but also the linguistic performance increases,

including syntax (Schreibman & Carr, 1978). Some studies confirm that echolalia intensified after the presentation of a story (novel speech) (Schreibman & Carr, 1978), both in the group of neurotic children and those on the autism spectrum. This leads to important conclusions that persons with autism may use echolalia as an active approach to communication and language learning. It is also important that echolalia has a verbal character. One of the most striking features of children with autism is their unwillingness to use verbal speech in communication. The appearance of echolalia suggests that the child is able to focus on speech itself. It is a very important element of the speech development of a small child. Healthy babies become sensitive to speech sounds already in the first months of life. Children with autism have difficulty in eliminating other sounds and noises from the environment (Siegel, 2012, p. 62), therefore, when a person with autism reveals an ability to verbalize, it is a positive sign for the acquisition of communication competences.

## Summary

Echolalia is one of many symptoms of disorders of language and communication skills in people with autism spectrum disorder. Strongly encoded in the child's speech, it is an inhibiting factor in language acquisition. This leads to the assumption that the primary function of language is the self-stimulation function for autists. Language in this case serves only these people, it is a closed means of focusing on oneself. Sometimes, like other self-stimulatory behaviours, it stimulates autists to unproductive activity and sometimes provides a safety valve against strong emotional tension. According to therapists, it is necessary to aim at excluding this type of behaviour at all costs (Korendo, 2013). Other deficits in the pragmatic use of language that may occur next to echolalia are: rigidity in understanding and using words, lack of generalization of the meaning of words, no use of words in new combinations, lack of willingness to communicate, poor ability to communicate with others, poor gestures and facial expressions when trying to compensate for lack of speech, inability to speak alternately, difficulties in mastering abstract concepts (e.g. time, colour, size), inability to use objects symbolically (Wardyn & Gałkowski, 2002, pp. 148–149). However, Prizant and Duchan (1981) and Stribling, Rae and Dickerson (2007) believe that echolalia can pave the way for purposeful communication. Błeszyński (1998) also states that children from the autism spectrum who use echolalia reveal a desire to communicate, and their positive attitude is a very important element in the selection of the communication channel. These positions are the same as the thesis that echolalia is used to learn repeated words (Charlop, 1983).

Thus, interdisciplinary research confirms the relationship between new stimuli and the increase in echolalia and indicates that less echolalia appears in the conditions of image storytelling (during visual hints) than in play situations with peers (Gladfelter & VanZuiden, 2020; Lew-Koralewicz, 2020, p. 188). These findings should be taken into account when planning therapy. Unlike children with autism spectrum disorders, neurotic children are more likely to develop their speech in new, diverse situations (Charlop, 1983). In light of the problem of generalization in the process of language learning, the authors of the article also wonder whether new words or phrases, language patterns learned in one place (e.g. in a speech therapist's office) may be transferred to a new environment (e.g. neighbour's house) (cf. Baer, Wolf & Risley, 1968).

## References


American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders. Firth edition. DSM-III*. Washington, DC: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders. Fourth edition. DSM-IV*. Washington, DC: Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders. Fourth edition. Text revision. DSM-IV-TR*. Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders. Fifth edition. DSM-5.* Arlington, VA: Author.

Bae, H., Park, J.Y., & Yang, Y. (2019). Improvement of post stroke echolalia after using selective serotonin reuptake inhibitors. *Dementia and Neurocognitive Disorders*, *18*(1), 30–32.

Baer, D., Wolf, M., & Risley, T. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, *1*, 91–97.

Bernard-Opitz, V. (1982). Pragmatic analysis of the communicative behaviour of an autistic child. *Journal of Speech and Hearing Disorders*, *47*, 99–109.

Białek, A. (2010). *Patrz, gdzie patrzę. Psychologiczne aspekty podejmowania cudzej perspektywy.* Kraków: Wydawnictwo UJ.

Bilikiewicz, A., & Strzyżewski, W. (Eds.). (1992). *Psychiatria. Podręcznik dla studentów medycyny.* Warszawa: Wydawnictwa Lekarskie PZWL.

Błeszyński, J. (1998). *Mowa i język dzieci z autyzmem. Wybrane zagadnienia*. Słupsk: Wydawnictwa Uczelniane WSP.

Błeszyński, J. (2010). Czy echolalia w autyzmie jest problemem komunikacyjnym?. In: B. Winczura (Ed.), *Autyzm. Na granicy zrozumienia* (pp. 101–110). Kraków: Impuls.

Bobkowicz-Lewartowska, L. (2005). *Autyzm dziecięcy. Zagadnienia diagnozy i terapii*. Kraków: Impuls.

Cameron, A.D. (2005). *Psychiatria*. Wrocław: Urban & Partner.

Cempa-Włodarczyk, K. (2016). Echolalia: zabawa słowem czy zaburzenie mowy? (Na przykładzie zachowań językowych autystycznej dziewczynki). *Słowo. Studia Językoznawcze*, *7*, 173–183.

Carr, E. (1979). Teaching autistic children to use sign language: Some research issues. *Journal of Autism and Developmental Disorders*, *9*, 345–359.

Charlop, M. (1983). The effects of echolalia on acquisition and generalization of receptive labeling in autistic children. *Journal of Applied Behavior Analysis, 16*(1), 111–126.

Creak, M. (1961). Schizophrenic syndrome in childhood (Progress Report of a Working Party, April, 1961). *Cerebral Palsy Bull, 3*, 501–504.

Enfield, N.J., & Levinson, S.C. (2006). Introduction: human sociality as a new interdisciplinary field. In: N.J. Enfield & S.C. Levinson (Eds.), *Roots of human sociality: Culture, cognition and interaction* (pp. 1–35). Oxford: Berg Publisher.

Faria Saad, A. de, & Goldfeld, M. (2009). A ecolalia no desenvolvimento da linguagem de pessoas autistas: uma revisão bibliográfica. *Pro Fono, 21*(3), 255–260.

Fay, W.H., & Butler, B.V. (1971). Echo-reaction as an approach to semantic resolution. *Journal of Speech, Language and Hearing Research, 14*(3), 645–651.

Frith, U. (Ed.). (2005). *Autyzm i zespół Aspergera*, tłum. B. Godlewska. Warszawa: Wydawnictwa Lekarskie PZWL.

Gałkowski, T. (1993a). Autyzm w rodzinie. Ujęcie interdyscyplinarne. *Kultura i Edukacja*, *2*, 85–102.

Gałkowski, T. (1993b). Autyzm. In: T. Gałkowski, T. Tarkowski & Z. Zaleski, Z. (Eds.), *Diagnoza i terapia zaburzeń mowy* (pp. 171–184). Lublin.

Gernsbacher, M.A., Geye, H.M., & Weismer, S.E. (2005). The role of language and communication impairments within autism. In: P. Fletcher & J.C. Miller (Eds.), *Language disorders and developmental theory* (pp. 73–93). Philadelphia: Benjamins.

Gernsbacher, M.A., Morson, E.M. & Grace, E.J. (2015). Language and speech in autism. *Annual Review of Linguistics*, *4*, 413–425. https://doi.org/10.1146/annurev-linguistics-030514-124824.

Giambattista, C., et al. (2019). Subtyping the Autism Spectrum Disorder: Comparison of Children with High Functioning Autism and Aspereger Syndrom. *Journal of Autism and Developmental Disorders*, *49*(1), 138–150.

Gladfelter, A., & VanZuiden, C. (2020). The Influence of Language Context on Repetitive Speech use in Children with Autism Spectrum Disorder. *American Journal of Speech Language Pathology*, *29*(1), 327–334.

Grabias, S. (2007). Język, poznanie, interakcja. Mowa. Teoria-Praktyka. In: T. Woźniak & A. Domagała (Eds.), *Język, interakcja, zaburzenia mowy. Metodologia badań* (pp. 355–377). vol. II. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.

Grabias, S. (2019). Język w procesie interakcji. Biologiczne i społeczne uwarunkowania zachowań językowych. In: M. Kielar-Turska & S. Milewski (Eds.), *Język w biegu życia* (pp. 60–99). Gdańsk: Harmonia.

Heller-Roazen, D. (2012). *Echolalie. O zapominaniu języka*. Gdańsk: Słowo/Obraz Terytoria.

Hobson, R.P. (1993). *Autism and development of mind*. Hove: Erlbaum.

Jakobson, R. (1968). Child language, aphasia and phonological universals. Mouton: The Hague.

Jarema, M. (Ed.). (2016). *Psychiatria: podręcznik dla studentów medycyny*. Warszawa: Wydawnictwo Lekarskie PZWL.

Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child*, *2*, 217–250.

Kanner, L. (1973). How far can autistic children go in matters of social adaptation? In: L. Kanner (Ed.), *Childhood psychoses: Initial studies and new insights* (pp. 189–214). Washington, DC: Winston.

Kominek, A. (2020). „Mówienie za kimś" jako język bez komunikacji. *LingVaria*, *2*(30), 135–148.

Korendo, M. (2013). *Językowa interpretacja świata w wypowiedziach osób z zespołem Aspergera*. Kraków: UP.

Lam, K.S., & Aman, M.G. (2007). The repetitive behavior scale-revised: independent validation in individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *37*, 855–866.

Landry, S., & McEvoy, R. (1988). The functions of immediate echolalia in autistic children: a developmental perspective. *Journal of Autism and Developmental Disorders*, *4*, 657–668.

Lecavalier, L., et al. (2006). Validity of the autism diagnostic interview-revised. *American Journal of Mental Retardation*, *111*, 199–215.
Lew-Koralewicz, A. (2020). Znaczenie echolalii odroczonej w procesie komunikacji dzieci z zaburzeniami ze spektrum autyzmu. *Fides et Ratio*, *42*(2), 2082–7067.
Lim, H.A. (2012). *Developmental Speech-Language Training through Music for Children with Autism Spectrum Disorder. Theory and Clinica Application*. London Philadelphia: Jessica Kingsley Publishers.
Lovaas, O.I. (1993). *Nauczanie dzieci niepełnosprawnych umysłowo*. Warszawa: Wydawnictwa Szkolne i Pedagogiczne.
Lovaas, O.I., Schriebman, L., & Koegel, R.L. (1974). A behavioral modification approach to the treatment of autistic children. *Journal of Autism and Childhood Schizophrenia*, *4*, 111–129.
Makarewicz, R. (2012). Kilka uwag o relewancji w poszerzonym dyskursie szkolnym. *Prace Językoznawcze*, *14*, 177–185.
Morton, A., Morton, E., & Grace, E. (2016). Language and speech in autism. *Annual Review of Linguistics*, *2*, 413–425.
Prizant, B., & Duchan, J. (1981). The functions of immediate echolalia in autistic children. *Journal of Speech and Hearing Disorders*, *46*, 241–249.
Przybyla, O. (2008). O procesie komunikacji i rozwijaniu kompetencji językowej w zaburzeniach autystycznych. *Forum Logopedyczne*, *15*, 11–14.
Przybyla, O. (2019). Facilitated communication in autism. A case study. *Logopedia Silesiana*, *8*, 351–362.
Przybyla, O., & Kasica-Bańkowska, K. (2016). *Wychowanie słuchowe małego dziecka*. In: K. Kaczorowska-Bray & S. Milewski (Eds.), *Wczesna interwencja logopedyczna* (pp. 546–581). Gdańsk: Harmonia Universalis.
Riper, V. (1963). *Speech correction*. New Yersey: Prentice–Hall.
Roberts, J.M.A. (1989). Echolalia and comprehension in autistic children. *Journal of Autism and Developmental Disorders*, *19*(2). 271–281.
Roberts, J.M.A. (2014). Echolalia and language development in children with autism. In: J. Arciuli & J. Brock (Eds.), *Communication in autism* (pp. 55–73). Amsterdam: Benjamins.
Schreibman, L., & Carr, E. (1978). Elimination of echolalic responding to questions trough the training of a generalized verbal response. *Journal o Apllied Behavior Analysis*, *11*, 453–463.
Siegel, K. (2012). Echolalia w mowie dziecka z całościowymi zaburzeniami rozwoju. Sposób na ucieczkę czy komunikację? *Studia Pragmalingwistyczne*, *4*, 59–70.
Simon, N. (1975). Echolalic speech in childhood autism. Consideration of possible underlying loci of brain damage. *Archives of General Psychiatry*, *32*(11), 1439–1446.
Shield, A., Cooley, F., & Meier, R.P. (2017). Sign language echolalia in deaf children with autism spectrum disorder. *Journal of Speech, Language and Hearing Research*, *60*, 1622–1634.
Skinner, B.F. (1957/2014). *Verbal behavior*. Brattleboro: Echo Point Books & Media.
Skudrzykowa, A., & Urban K. (2000). *Mały słownik terminów z zakresu socjolingwistyki i pragmatyki językowej*. Kraków–Warszawa: Spółka Wydawniczo-Księgarska.
Sperber, D., & Wilson, D. (2004). Relevance Theory. In: G. Ward & L. Horn (Eds.), *Handbook of pragmatics* (pp. 607–632). Oxford.
Stiegler, L.N. (2015). Examining the echolalia literature: where do speech-language pathologists stand. *American Journal of Speech Language Pathology*, *24*, 750–762.
Stribling, P., Rae, J., & Dickerson, P. (2007). Two forms of spoken repetition in a girl with autism. *International Journal of Language and Communication Disorders*, *42*(4), 427–444.
Wardyn, M., & Gałkowski, T. (2002). Echolalia u dzieci z autyzmem i jej rozwojowe uwarunkowania. *Audiofonologia*, *2*, 147–177.
World Health Organization. (s.a.). *ICD-11: International classification of diseases 11th revision: The global standard for diagnostic health information*. icd.who.int/en [access: 2.06.2020].